



Center celebrates 40th anniversary Sept. 21

Nearly 40 years ago, President Dwight D. Eisenhower arrived in Huntsville to dedicate the fledgling NASA installation that would become the George C. Marshall Space Flight Center.

On Sept. 21, Marshall Center employees and retirees are invited to a celebration at the Center to mark Marshall's activation on July 1, 1960, and its dedication by Eisenhower on Sept. 8, 1960.

"Our theme is '40 Years of Excellence, The Adventure Continues,' a reminder from the early days of rocketry all the way up to Chandra's launch last summer of the great adventures we've had over the years at Marshall," said Marshall Center Director Art Stephenson. "We're taking a great

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Photo by Doug Stoffer, NASA/Marshall Space Flight Center

Safety Bowl kicks off

The Procurement Office beat Science Directorate's Team A in Marshall's Safety Bowl kickoff match Wednesday. Competition continues Sept. 6 at 10 a.m. with the Space Shuttle Projects Office vs. Engineering Directorate Team A. At 10:30 a.m. the Systems Management Office takes on Engineering Directorate Team B. The Office of the Chief Financial Officer meets Transportation Directorate Team A at 2 p.m., and the Customer and Employee Relations Directorate takes on Transportation Directorate Team B at 2:30 p.m.

NASA awards contracts to study ISS resupply

by Martin Burkey

NASA has awarded four small businesses 90-day contracts totaling \$902,000 to develop concepts and requirements to provide access to the International Space Station on emerging launch systems.

These studies could uncover a potential backup capability, augmenting the station's primary resupply vehicles — the U.S. Space Shuttle, Russian Progress, European Space Agency Automated Transfer Vehicle and the Japanese H-II Transfer Vehicles.

"Alternate Access to Space Station is a potential market opportunity for emerging or established U.S. launch companies,"

said Dan Dumbacher, manager of the 2nd Generation Reusable Launch Vehicle Program Office at the Marshall Center. "These companies will develop concepts for alternate access to the Space Station, determine what a launch service needs to do to meet the requirements, and offer suggestions on specific development risk reduction activities — such as technology development or business planning — that we need to perform."

Companies selected

Companies selected are:

- Andrews Space and Technology of El Segundo, Calif., \$195,000;
- Microcosm Inc. of El Segundo, Calif., \$198,000;
- HMX Ltd. of Reno, Nev., \$245,000;
- Kistler Aerospace Corp. of Kirkland,

Wash., \$264,000.

The contingency resupply service under study would seek to be capable of launching within a week if necessary and could enhance the Space Station's operational flexibility if primary delivery methods were unavailable. Established launch services companies are studying the same idea under existing contracts managed by Kennedy Space Center, Fla.

"This potential alternate means of transportation could help us meet our commitments to the Station," Dumbacher said.

The contracts, set aside for small business, are managed by Marshall under the Alternate Access Project of the Space Launch Initiative.

The writer, employed by ASRI, supports the Media Relations Department.

"The Safe Way is the Right Way"

— Safety slogan submitted by
Jonathan Baggs, ASRI

Rodgers named manager of Propulsion Research Center

Dr. Stephen L. Rodgers Jr. has been named manager of Marshall's Propulsion Research Center of the Space Transportation Directorate.

Rodgers is widely recognized within the Department of Defense, NASA and the national and international communities as a leading expert in the full range of advanced propulsion research. He was hand-picked by the U.S. Air Force to play a prominent role in leading, developing and initiating state-of-the-art research efforts in support of the Air Force's air and space superiority efforts.

Recently, he served on a rotational assignment to the Pentagon in Alexandria,

Va., where he developed and implemented science, technology and acquisition policy for the assistant secretary of the Air



Rodgers

a variety of positions at the Air Force Research Laboratory, Phillips Laboratories, Astronautics Laboratory, and the

Force. This assignment enabled him to establish important interfaces with Congress, congressional staff members, federal agency heads and a host of other high-ranking officials.

Prior to his Pentagon assignment, Rodgers held

Rocket Propulsion Laboratory at Edwards Air Force Base, Calif.

He is credited with proposing and initiating the High Energy Density Materials program that often is cited as a cooperative research program model. He also directed and led the development of new propulsion concepts that have the potential to significantly reduce cost of launch and a new energetic compound that the American Chemical Society named as one of the top five achievements in chemistry for 1999.

Rodgers holds a doctorate degree in organic chemistry from the University of Nevada in Reno and a bachelor of science degree in chemistry from Point Loma College in San Diego, Calif. He is the author/coauthor of over 30 publications.

Upcoming Events

Lessons Learned — "Proposal Lessons Learned" will be from 8 a.m.-noon Sept. 6 in Bldg. 4200, room P110. This lecture is being presented by Dennis Beebe and Al Casey, who conduct Red Team reviews of government proposals. The information shared will give attendees valuable insight into the review process and techniques for more effective Red Team reviews. Topics will include analysis of Request for Proposal documentation, evaluation of draft proposals and presentation of evaluation results for action. Civil servants should register via AdminSTAR. For more information, call Vanessa Suggs at 544-7527.

New Employee Orientation — A New Employee Orientation will be Sept. 18-20 at Sci-Quest on Wynn Drive for all new Marshall employees hired during the summer months. All employees scheduled to attend will receive an official letter requesting their attendance prior to the orientation.

Amnesty Day — The Marshall Center will hold Amnesty Day from 9 a.m.-2 p.m. Sept. 7 on the north side of Bldg. 4481. Employees are encouraged to turn in hazardous chemicals with expired shelf-life and unneeded and unclaimed chemicals.

History Chat — Marshall Center historian Mike Wright will be the featured speaker at Friday's history chat from 11-11:30 a.m. in the Heritage Gallery, Bldg. 4203. This series of history chats is being held in conjunction with Marshall's 40th anniversary celebration.

CFC 2000 committee sponsors poster contest

Marshall's Combined Federal Campaign 2000 committee is sponsoring a poster contest for students who are dependents of Marshall Center civil servants, contractors and retirees.

The contest serves as an introduction to the campaign slated for kickoff Oct. 5 in Morris Auditorium.

Entries in the poster contest must meet the following guidelines:

- Applicant must be in kindergarten – 12th grade. There are three award levels (K-5, 6-8 and 9-12 grades). One winner will be selected from each level.
- The applicant must be a dependent of a Marshall civil servant, onsite contractor or retiree to participate.
- One overall winner will be selected for inclusion in a Combined Federal Campaign poster.
- Applicant must submit a sheet of paper that contains the student's name, address, phone number, grade, school and Marshall contact.
- Poster must address and incorporate the theme: "Care Enough to Share Enough"
- Poster must be 8.5 inches by 11 inches.
- Submissions are due no later than Sept. 15 to ED36/Dawn Cross (CFC vice president for promotions), Bldg. 4612, room 1032
- Decisions of the judges are final. The committee is not responsible for submissions lost in the mail.

Note: Posters will not be returned to the applicant.

Arthur J. Henderson Jr., a structural materials engineer in Marshall's Engineering Directorate, Materials, Processes and Manufacturing Department, has been elected national recording secretary by the National Delegate Assembly of Blacks in Government for 2001-2002.

Henderson also will serve on the board of directors and executive committee.

The National Organization of Blacks in Government is the only non-profit organization focused on equity, excellence and opportunity for African American employees at all levels of government. The organization is celebrating its 25th anniversary.

In conjunction with the National Delegate Assembly and Anniversary Celebration, the group held its 22nd annual National Training Conference in Washington, D.C. It was attended by more than 3,000 government employees and managers.

The organization's mission and objectives include eradicating all vestiges of unlawful treatment; eliminating institutionalized racism and discrimination, encouraging pride and motivation toward full and equal opportunities; sponsoring a national effort to promote well-being, education and professional development; and providing a non-partisan position on major issues of local, regional and national significance.

For more information, call Henderson at 544-2577 or Blacks in Government at (202) 667-3280, or visit the Web at: <http://www.bignet.org>



Henderson

Shuttle Atlantis set to launch Sept. 8

Launch of Space Shuttle Atlantis has been set for Sept. 8 on an 11-day mission that will open the doors to the International Space Station's new living quarters.

Atlantis's liftoff from the Kennedy Space Center on Shuttle Mission STS-106 will be targeted for 7:45 a.m. CDT at the opening of a launch window that will be less than five minutes long. The crew of seven will spend a week docked to the International Space Station, unloading more than one and a half tons of equipment and supplies from both the Shuttle and from a docked Russian Progress cargo craft.

This mission will set the stage for the arrival of the first resident Station crew, planned to launch and begin living aboard the outpost later this year.

Terry Wilcutt will command Atlantis and Scott D. Altman will pilot. The crew also includes Edward T. Lu, Richard A. Mastracchio, Daniel C. Burbank, Yuri I. Malenchenko and Boris V. Morukov as mission specialists.

Atlantis is scheduled to land at the Kennedy Space Center at about 3 a.m. CDT Sept. 19.

Eligibility to use Marshall Medical Center explained

Civil servants and contractors in certain instances are authorized use of the Marshall Medical Center. Contractors are authorized to visit the Medical Center when they experience any work-related injury or illness or for a scheduled physical examination. Contractors who have potential adverse exposures on-the-job are provided physical exams tailored to their work environment. These potential exposures include radiation, lasers, chemicals, asbestos, noise, lead or mercury, and include occupations such as food handler, security guard, heavy equipment operator or pilot.

Contractors should not report to the Marshall Medical Center for injuries suffered off-the-job or when an illness is not work-related, such as colds or flu.

Contractors seeking medical treatment for an on-the-job injury should emphasize the specific name of their employer — not NASA/MSFC — to any medical facility.

Civil servants should report to the Medical Center when they experience any work-related injury or illness or for immediate attention for minor illnesses or injuries.

Civil servants also should report to the Medical Center when a physical examination appointment has been scheduled. Civil service personnel may be scheduled for a physical under two categories: a periodic examination or a monitoring/mandatory examination based on potential work exposures.

For medical emergencies, anyone can summon an ambulance by dialing 911.

Sports

Volksmarch — The Tennessee Trail of Tears Volksmarch, sponsored by the Elkton Trail of Tear Club, will be Saturday in Elkmont, Tenn. Starting time is 8:30 a.m. at Lib's Grocery on U.S. 31 North. For more information, call (931) 468-0668.

MARS Golf — A two-person best score tournament will be at 7:30 a.m., Sept. 16 at Point Mallard Park in Decatur. Deadline to register is Sept. 8. For more information or to enter a tournament, call Lee Foster at 544-1589. Entry fees are \$5.

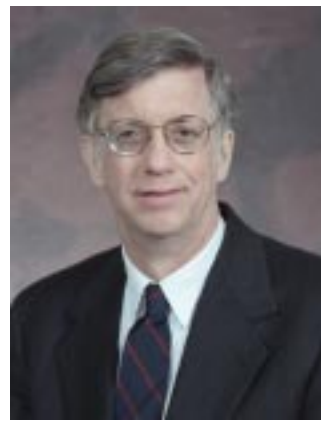
MARS Fishing Club — Results of the Aug. 26 bass tournament on Guntersville Lake at Goose Pond are: first place — Charlie Nola and Ross Evans, 6.51 lbs.; second place — Deon Smith and Tim Smith, 5.86 lbs.; third place — Rob Butler and Josh Butler, 4.14 lbs.; and big fish — Ross Evans, 3.64 lbs. The next tournament will be Sept. 16 on Wheeler Lake in Decatur. For information, call Ross Evans at 961-2305.



Thirty-one Marshall employees and contractors have been selected to attend the Sept. 8 launch of Shuttle Mission STS-106 at Kennedy Space Center in Florida.



Stanley I. Adelfang, CSC



Sherwood H. Anderson, SD10



Carol B. Beck, Cortez III



Norma R. Bolander, RS30



Howard Dewitt Burns, ED31



Theresa Carroll Clark, HEI



Barbara J. Cobb, FD32



Reginald Cobb, ED02



Joyce Eagan, AD02



Alfred O. Fischer, TBE



John F. Ford, CSC



Jack M. Grass, HEI



Betty Jean Haley, TD31



Kathy A. Hatley, AD35



James Holt, ED25



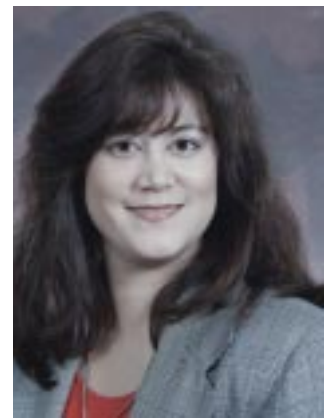
David B. Hudson, P&W



William W. Hopkins, ED18



Cheryl Houston-Davis, Infinity



Marianne F. Huie, SD80



Alvin Jones, SD43



Timothy O. Kelley, MP21



Kimberly Lankford, NTI



Stanley McCall, PS01



Arturo J. Morales, QS20



Kimberly G. Muery, FD42



Tina Palacios-LaBair TD03



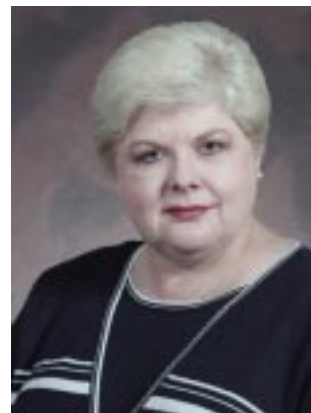
Dawn M. Ray, TD61



Barbara M. Shannon, MP51



Andrew W. Smith, ED 20



Brenda J. Sutherland, ED43



Rachel E. Stewart, CD02

Marshall marks 40th anniversary

Marshall meets challenges of Hubble Space Telescope

This is the 10th in a series of historical articles the Marshall Star will publish this summer on the history of the Marshall Center.

by Mike Wright

Long before mankind had the ability to go into space, astronomers dreamed of placing a telescope above Earth's obscuring atmosphere. In 1923, the German scientist Hermann Oberth proposed an observatory in space. Oberth's work inspired Dr. Wernher von Braun's interest in space travel.

Scientific instruments installed on early rockets, balloons and satellites in the late 1940s through the early 1960s produced enough exciting scientific revelations to hint at how much remained to be discovered.

In 1962, just four years after NASA was established, a National Academy of Sciences study group recommended the development of a large space telescope as a long-range goal of the fledgling space program. Similar groups repeated the

recommendation in 1965 and 1969.

NASA assigned responsibility for design, development and construction of the large space telescope to the Marshall Center. Marshall selected two primary contractors to build the Hubble Space Telescope. Perkin-Elmer Corp. in Danbury, Conn., was chosen to develop the optical system and guidance sensors. Lockheed Missiles and Space Co. of Sunnyvale, Calif., was selected to produce the protective outer shroud and the spacecraft systems for the telescope, as well as to assemble and test the finished product.

Beyond assigning project contracts, Marshall managed hardware and assembly preparations. The Center also worked to define the project's science and engineering requirements. Marshall crew systems experts developed the tools, workstations and procedures which would be needed for orbital servicing of the telescope, and conducted numerous tests of orbital maintenance and repair techniques using Marshall's Neutral Buoyancy Simulator. Marshall's technical resources also were tapped for everything from the telescope's structural engineering to its fine guidance

sensors.

Later, Marshall Center's involvement continued as its personnel played key roles in tests of the observatory on the ground and on the launch pad — the latter monitored from Marshall's Huntsville Operations Support Center.

Marshall also managed the activation and orbital verification of the telescope and science instruments from Goddard Space Flight Center in Greenbelt, Md., during Hubble's first several months in orbit.

The Hubble Space Telescope, with a resolving power calculated to be 10 times better than any telescope on Earth, was poised to open a new era in astronomy. Within a few months, however, a flaw was discovered in Hubble's main mirror that significantly reduced the telescope's ability to focus.

The focusing defect was due to spherical aberration, an optical distortion caused by an incorrectly shaped mirror. The mirror was too flat near the edge by about 1/50th the width of a human hair. Instead of being focused into a sharp point, light

*See **Hubble** on page 7*



Photo by Doug Stoffer, NASA, Marshall Space Flight Center

Huntsville honors Jan Davis

Huntsville Mayor Loretta Spencer, left, helps Dr. Jan Davis, deputy director of Marshall's Flight Projects Directorate, unveil the street sign for the newly dedicated Jan Davis Drive.

Anniversary

Continued from page 1

tradition started by Dr. Wernher von Braun and carrying it to the future.”

Ray Adams of Computer Sciences Corp., and John Livingston, a retired Marshall team member who now works for United Space Alliance in Huntsville, developed the theme.

The celebration will mark the four decades since Eisenhower formally announced that he was naming the Center after his fellow World War II general and post-war statesman Gen. George C. Marshall.

Everyone who works at Marshall, as well as retirees, should mark Sept. 21 on the calendar and plan to attend, said Mike Wright, who chairs the committee planning the celebration.

A video about Gen. Marshall will be shown Centerwide Sept. 19 at Marshall. In addition, a 40th anniversary video reviewing the Marshall Center’s first 40 years will premiere at 10 a.m. Sept. 20 in Morris Auditorium. The video features employees as actors in a series of Marshall historical vignettes, and interviews with retirees reflecting on the Center’s history.

Celebration events Sept. 21 begin at 9 a.m. in Morris Auditorium with a musical tribute to Gen. Marshall performed by the 283rd U.S. Army Band from Fort Benning, Ga., where Gen. Marshall served with distinction following World War I.

Following the ceremony, Stephenson will welcome Apollo 17 astronaut Gene Cernan to the stage in Morris Auditorium. Cernan will be keynote speaker for the 40th anniversary and will later sign copies of his latest book. Copies of Cernan’s book, “Last Man on the Moon,” may be ordered from the NASA Exchange in Bldg. 4752 through Sept. 7. Cost is \$19.

At 10:30 a.m., a forum will be held in Morris Auditorium on Marshall’s four decades of service to the nation and on its role in the future of space exploration. The Marshall Association will host the forum. Participants will include Stephenson, Deputy Director Carolyn Griner; retired Center directors Dr. William Lucas and Thomas J. Lee; and retired Associate Director, Technical, Bob Schwinghamer.

At lunchtime, activities will move to the Bldg. 4200 quad. There



Marshall Space Flight Center
1960–2000
40 Years of Excellence – The Adventure Continues

is no charge to attend any celebration activity. However, those planning to attend may wish to purchase a meal ticket at \$2 each, for a choice of barbecue sandwich or garden salad. The meal also will include a cookie, chips and drink. Ticket purchasers will receive a 40th anniversary souvenir mug with their meal.

Tickets will be available Sept. 5-14 from administrative officers or at the NASA Exchange in Bldg. 4752. Lunchtime entertainment will be by the 283rd U.S. Army Band.

At 1 p.m., Stephenson will lead a special time capsule ceremony in the Bldg. 4200 quad. The capsule will be opened in 2035 by participants in the Center’s 75th anniversary.

Following the ceremony, the Latin Rhythms Band will entertain. Their performance will coincide with Marshall’s observance of Hispanic Heritage Month.

At 2 p.m., celebration participants will cap the day’s events with birthday cake and refreshments. Work is under way on the centerpiece for the celebration — an anniversary cake with four tiers representing each of Marshall’s four decades.

Hubble

Continued from page 6

collected by the mirror was spread over a larger area in a fuzzy halo. Images of objects such as stars, planets and galaxies were blurred. However, on relatively bright objects, Hubble’s cameras were still able to provide images far superior to any telescope on the ground.

The mirror itself couldn’t be fixed or changed; so the challenge facing NASA was to develop corrective optics for Hubble’s instruments, much like eyeglasses or contact lenses correct human sight.

On Dec. 2, 1993, the STS-61 crew launched on Space Shuttle

Endeavour for an 11-day mission with a record five spacewalks planned. The astronauts endured long hours of challenging spacewalks to install instruments containing the corrective optics and replaced the telescope’s solar arrays, gyroscopes and other electronic components.

The crew completed everything it set out to do and the mission was declared a success. After five weeks of engineering checkout, optical alignment and instrument calibration, the confirmation of success came as the first images were received on the ground from the space telescope.

The writer is the Marshall Center historian.

Employee Ads

Miscellaneous

- ★ One Rally and one Wizard lawn mower, 22", \$40 each; Sears weed wacker w/extra plastic lines, \$120. 772-3400
- ★ Girl's bike, 18", \$45; boy's go cart, \$75. 922-9387
- ★ Iomega 100MB ZIP drive, parallel port, in box, never used, \$60. 534-6022
- ★ Wood kitchen table and six chairs, maple, table extends to 60", \$135. 883-4276
- ★ Talladega Tower race ticket for Oct. 15, \$105. 895-8385
- ★ Junior Phonics game, complete set, \$75. 776-9165
- ★ Cook top, 4 unit, white, \$25. 355-0348
- ★ Murray riding lawn mower, rear engine, 30" cut, 8.5HP, 2 yrs. old, \$325. 464-5819
- ★ Two Nintendo 64 games, Golden Eye 007; three bicycles, \$20 each. 830-0854
- ★ 1992 Suzuki GXR 750, black/gray, good tires, including front spare tire and helmet, \$4,500. (901) 645-7955, Ext. 260
- ★ Sears microwave oven, 1.45 cu. ft., \$65; Solid oak entertainment center, 71"x21"x30", \$200; Tiller, \$150. 881-6040
- ★ Refinished 1930s era antique table w/6 chairs, \$725. 232-9632
- ★ All wood 4x8 trailer, 2-foot side boards, standard tires, \$200. 837-0559
- ★ Toshiba Infinia 7201 computer, Pentium 32MB, 2G hard drive, Win95, Intouch control system, \$500. 233-1487
- ★ 1993 Harley Davidson Sportster XLH 883, 14,300 miles, many extras, \$8,000. 882-9053
- ★ Computer, monitor, speakers, printer and scanner, \$800. 881-4067
- ★ Propane cylinders w/gauge, 2,100 lb., 1 year old, \$50 each. 233-1487
- ★ Mix match full set springs, mattress, new, still wrapped, \$175 obo. 881-6436
- ★ Wooden shed, 10x15, \$40, or trade for working chain saw. 895-2959
- ★ Treadmill w/adjustable slope and electronics, including heart rate monitor; \$150. 971-1414
- ★ Oak dining room set: table and 4 chairs, \$200 obo. 464-9055/leave message
- ★ Dark green/teal lounge, \$300; Lane wing-

back recliner, needs upholstery, \$50. 881-1090

- ★ Moving sale: queen bed; pedestal dining table w/4 chairs; coffee & end tables; washer; microwave; TV; VCR; & more. 539-5570

Vehicles

- ★ 1989 Chevy C1500, LWB, bedliner, 350 V-8, 164K miles, one-owner, \$4,450. 837-2386
- ★ 1991 Isuzu Rodeo, V-6, air, auto, CD, 164K miles, power windows, \$3,800 obo. 518-9802
- ★ 1994 Chrysler New Yorker, leather, electric seats, windows, doors, etc., 80K miles, \$6,400. 536-3697
- ★ 1927 Phaeton T-Model, new battery, fanbelt, exhaust pipe and muffler, \$7,900. 764-2492 after 7 p.m.
- ★ 1991 Ford Ranger XLT, supercab, white/red, 3.0L, V-6, 5-speed, 123K miles, one-owner, air, alloy wheels, \$4,200. 729-8089
- ★ 1989 Pontiac Grand Prix, air, new tires, battery, 110K miles, one-owner, \$3,000 offer. 650-5128
- ★ 1992 Ford Chateau Club wagon, \$6,500 obo. 830-5783
- ★ 1986 Taurus, 4-cylinder, 5-speed, sport rims, all power, \$1,500 obo. 881-8220
- ★ 1997 Mustang, 6-cylinder, auto, black/tan, a/c, PW/PL, anti-lock brakes, new tires, \$8,750. (256) 753-2278
- ★ 1992 Buick Regal Custom, one-owner, maroon, a/c, all power, AM/FM cassette, cruise, 101K miles, \$4,250. 534-4785
- ★ 1996 Impala SS, black, sun-roof, CD, leather, \$20,000 obo. 539-8723
- ★ 1984 Ford Bronco XLT, 302 engine, less than 10K miles, new tires, locking hubs/brakes, \$3,500. 757-0320/517-0657 pager
- ★ 1989 GMC S-15 Jimmy, 4WD, 4.3L, black/blue, 210K miles, \$2,800 obo. 837-6517
- ★ 1995 Buick LeSabre Limited, one-owner, 65K miles, all power, reasonable offer. 539-3858
- ★ 1997 Volvo 850; 44K miles, gray/tan leather interior, keyless entry system, alloy wheels, \$17,500. 464-0337
- ★ 1995 Mercury Villager LS minivan, 85K miles, leather interior, CD, most options,

\$10,900. 880-6792

Found

- ★ One white legal pad, 8.5 x 11, w/various notes, near Bldg. 4200. Call 544-4758 to identify/claim
- ★ Bracelet, found in Bldg. 4663/Room 371H on August 18. Call 544-1303 to identify
- ★ Money, Bldg. 4203, give date and amount. 544-3037
- ★ Money at Bldg. 4200 ramp area. Call 544-4758 to identify

Wanted

- ★ Clothes washer and dryer. 971-6885
- ★ Used vacuum cleaner, working condition, upright preferred. 881-0557
- ★ Styrofoam pieces to insulate dog houses; also, packing peanuts. 461-8369
- ★ Adjustable hand weights/dumb bells; adjustable exercise bench. 971-0292
- ★ Ride to work, 7 a.m.-3:30 p.m., Governors Drive/Huntsville Hospital area, will pay \$6 per day. 534-5398

Center Announcements

- ☛ **"NOISES OFF" Tickets** — Theatre Huntsville kicks off its fall season at the Von Braun Center Playhouse with "NOISES OFF" at 7:30 p.m. Sept. 8-9 and 14-16 and 2 p.m. Sept. 10. Marshall employees, retirees and contractors can receive a \$1 discount off tickets — up to four tickets — by showing their Marshall badge at the box office one hour before each performance. For more information, call Candy Bailey at 544-7565. To reserve seats, call 852-8730.
- ☛ **Lunch Time Prayer** — Lunch time prayer will be from noon-12:30 p.m. every Tuesday and Thursday in Bldg. 4200, room 432. For more information, call Johnnie Wilson at 544-1007.
- ☛ **Toastmasters** — Redstone Toastmasters meets weekly at 6 p.m. on Tuesday at Piccadilly Cafeteria in Madison Square Mall. The NASA Lunar Nooners Toastmasters Club meets Tuesday at 11:30 a.m. in Bldg. 4610 cafeteria conference room.

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